

CLAIMS

[1] A biosensor for measuring a test substance included in a sample, comprising:

a substrate;

5 a sample receiving section provided on said substrate to which said sample is supplied;

a reagent section provided in said sample receiving section and including a reagent to be reacted with said test substance; and

a moisture absorbing material that is changed in color through absorption of moisture,

10 wherein a degree of degradation of said reagent is shown on the basis of a proportion of a portion of said moisture absorbing material changed in color.

[2] The biosensor of Claim 1, further comprising a cover for covering said moisture absorbing material,

wherein a part of said moisture absorbing material is exposed.

15 [3] The biosensor of Claim 2,

wherein the degree of degradation of said reagent is shown on the basis of a degree of color change of a portion of said moisture absorbing material that is present at a given distance from the exposed part and is covered with said cover.

[4] The biosensor of Claim 1,

20 wherein said reagent includes an enzyme.

[5] The biosensor of Claim 4,

wherein said reagent section further includes an electron mediator.

[6] The biosensor of Claim 5, further comprising:

a pair of terminals provided on said substrate; and

25 a pair of electrodes provided in said sample receiving section to be spaced from

each other and respectively connected to said pair of terminals.

[7] The biosensor of Claim 1,

wherein said reagent includes at least one of an antibody and an antigen.

[8] The biosensor of Claim 1,

5 wherein said moisture absorbing material is in the shape of a sheet.

[9] The biosensor of Claim 1, further comprising a covering member made of a light blocking material and formed over said substrate for covering said sample receiving section.

[10] The biosensor of Claim 8,

10 wherein said moisture absorbing material in the shape of a sheet is provided on a face of said substrate opposite to a face thereof on which said sample receiving section is provided, and

a sheet for covering said moisture absorbing material is provided on said moisture absorbing material.

15 [11] A biosensor measuring apparatus for measuring a test substance included in a sample by using a biosensor including a substrate; a sample receiving section provided on said substrate and containing a reagent section including a reagent to be reacted with said test substance; and a moisture absorbing material changed in color through absorption of moisture, comprising:

20 a detecting section including a light source for irradiating said moisture absorbing material with light and a photo detecting device for receiving incident light emitted from said light source through said moisture absorbing material; and

a measuring section connected to said detecting section for measuring an optical characteristic of said incident light and for determining a degree of degradation of said
25 reagent included in said reagent section of said biosensor on the basis of said optical

characteristic of said incident light.

[12] A measurement method for measuring a test substance included in a sample by using a biosensor including a substrate; a sample receiving section provided on said substrate and containing a reagent section including a reagent to be reacted with said test substance; and a moisture absorbing material changed in color through absorption of moisture, comprising the steps of:

fitting said biosensor on a biosensor measuring apparatus;

determining a degree of degradation of said reagent on the basis of a degree of color change of said moisture absorbing material; and

10 measuring said test substance under measurement when the degree of degradation of said reagent is determined to be small in the determining step and stopping to measure said test substance under measurement when the degree of degradation of said reagent is determined to be large.